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# The U.S. Commitment to the GATT System: A Reappraisal of Basic Assumptions

Thomas R. Howell\*  
R. Michael Gadbow†

The United States (U.S.) has often been described as a nation without an industrial policy. In fact, however, as a U.S. government official told representatives of the Organization for Economic Cooperation and Development (OECD) nations in 1982,

We do have [an industrial policy]. It is simpler than the policies some of you have adopted. It requires no major public expenditure, no planning and no direction by government. The key decisions are left to those closest to the market—the firms themselves. But our policy, which relies on the free play of market forces to ensure that structural change and adaptation take place regularly, is a true industry policy. . . .<sup>1</sup>

Domestically, U.S. “industrial policy” has been manifested through a general pattern of government non-intervention in the market; internationally, through a commitment to a world trade order characterized by free trade and open markets. Fortified by an abiding belief in the strength of our own private enterprise economy, we have encouraged our frequently less sanguine trading partners to join with us in a succession of multilateral commitments, most notably the General Agreement on Tariffs and Trade (GATT)<sup>2</sup> and its satellite agreements, designed

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1. Telegram to U.S. Dep’t of Commerce (undated), *available in* Certain Steel Products from the Federal Republic of Germany, Dep’t of Commerce Docket No. A-428-004 (reproducing the statement of the U.S. Representative to the OECD Steel Committee on July 21, 1982).

2. General Agreement on Tariffs and Trade, *opened for signature* Oct. 30, 1947, 61 Stat. A3, T.I.A.S. No. 1700, 55 U.N.T.S. 187 [hereinafter cited as GATT].

to reduce trade barriers and eliminate mercantilism as a significant factor in international economic relations.

The extraordinary burst of worldwide economic growth that accompanied reduction of at-the-border restrictions in the first decades of the GATT system validated our faith in the merits of an open trading system. In the 1980s, however, facing a deteriorating trade balance and the decline of many traditionally strong industrial sectors, the wisdom of continuing our commitment to a system of free world trade is being questioned. In part the problems of U.S. industry reflect macroeconomic factors which are unrelated or only marginally related to trade issues; yet it is also clear that in many instances reversals suffered in international competition have had a significant adverse effect on the long-term health of numerous U.S. industries. It is therefore worth reexamining our commitment to the GATT system, and, in particular, some of the basic assumptions which underlie that commitment.

The GATT system was established by a fairly homogeneous group of 24 countries in the late 1940s. With the exception of the U.S., the signatory nations were, for the most part, European or British Commonwealth countries with market economies. These governments shared a rough consensus on the fundamental goals of an international trading system. They intended to avoid the economic warfare that had characterized international trade in the late 1930s. Trading relationships were to be governed by a mutual commitment to commonly understood notions of fairness and equity. This meant allowing producing enterprises to compete, according to a set of agreed rules, without national government interference intended to affect the competitive outcome. Disputes were to be resolved by reference to the basic equitable principles shared by the signatories. The signatories believed that the system would ultimately benefit all participants by permitting producing enterprises to exploit their comparative advantages and thus optimize the use of the world's resources and maximize the total output of goods and services available to meet mankind's needs.<sup>3</sup>

The U.S. Congress has always harbored reservations about the GATT system. Although its postwar legislative enactments in the trade arena demonstrate a commitment to the basic principles of the original GATT consensus, they have been tempered by the pragmatic concern that our trading partners would not fully adhere to these principles in practice.<sup>4</sup> Thus, while the Congress has delegated the authority to negotiate successive rounds of tariff reductions to the Executive, it has also enacted an array of unilateral trade remedies to counter specific "unfair" foreign trade practices. These remedies are designed to offset what we would view as deviations from the original GATT consensus, such as export subsidies which create artificial comparative advantages for producers in other nations.

Since the conclusion of the last major round of trade negotiations in 1979, U.S.

3. L. McQUADE, *GATT PLUS—A PROPOSAL FOR TRADE REFORM* 3 (1976).

4. See Dymock & Vogt, *Protectionist Pressures in the U.S. Congress*, 17 J. WORLD TRADE L. 496 (1983).

attention has focused on the increasing level of foreign government intervention in trade. Increasing intervention tends to confirm Congressional apprehension about an open system. To some, this assessment is an illusion created by the overall lowering of tariffs which has made visible the nontariff barriers (NTBs) which were barely discernible before. However, the concern over government intervention goes beyond NTBs themselves. It goes to their very objective: these and other foreign government policies seek to dictate international competitive outcomes. This realization, coupled with the fact that America's competitive edge has been narrowed or lost across a broad spectrum of industries, calls into question some of the assumptions underlying our postwar trade policy.

## I. FAIRNESS: THE BASIC NOTION OF U.S. POSTWAR TRADE POLICY

Perhaps the most basic of these assumptions is that some commonly shared notion of fairness exists on which to base a world trade order characterized largely by *laissez-faire* competition. "Unfair" practices are those which disrupt that order and prevent enterprises from competing on a "level playing field." The theory of comparative advantage, the economic justification for *laissez-faire*, concludes that all nations benefit from the freest operation of the market. A free market ensures the most efficient production of goods because individual producers maximize their wealth by exploiting their particular factor advantages (capital, labor, or resources). Government intervention in competition—through import restrictions, subsidies, or other means—distorts this process, creating an artificial or unfair comparative advantage, which ultimately detracts from the general wealth.

The postwar consensus presupposed that the concept of fairness required a willingness to accept the verdict of the market during the normal course. However, many of the increasingly heterogeneous group of nations which comprise the group participating in the GATT system have been unwilling to entrust their economic future to the vagaries of the market, or to subscribe to the notion that interference with the market mechanism is unfair. Japan, which joined the GATT in 1955, systematically set out to create comparative advantages for designated industries through government promotional measures. It saw nothing unfair about that process. As a vice-minister of Japan's Ministry of International Trade and Industry (MITI) told the OECD Industry Committee in 1970:

After the war . . . Japan's first exports consisted of such things as toys and other miscellaneous merchandise and low-quality textile products. Should Japan have entrusted its future in the theory of comparative advantage in these industries characterized by intensive use of labor? . . . If the Japanese economy had adopted the simple doctrine of free trade and had chosen to specialize in this kind of industry, it would have almost permanently been unable to break away from the Asian pattern of stagnation and poverty . . . [MITI] decided to establish in Japan industries which require intensive employment of capital and technology, industries that in consideration of comparative cost of production should not be the most inappropriate for Japan, industries such as steel, oil refining, petrochemicals, auto-

mobiles, aircraft, all sorts of industrial machinery, and electronics, including electronic computers.<sup>5</sup>

It is not surprising that a similar rationale has been embraced by the numerous developing nations, many just emerging from colonial status, which have joined the GATT in recent decades. For many of these nations, acceptance of *laissez-faire* and the theory of comparative advantage would mean continued subordination to advanced western economies. Like Japan before them, developing countries have found that they can create comparative advantages in particular sectors within a relatively short time through a combination of market protection and intensive government aid. This combination makes possible, for example, the acquisition of state-of-the art production equipment and entire "turnkey" plants from western nations.

The developing countries assert the need to employ measures such as market protection and subsidies, which would be condemned under our own traditional notions of fair trade, to offset comparative advantages enjoyed by the advanced industrial nations. The market distorting effect of such measures is justified by an appeal to equity. The poorer nations argue that "developing countries are entitled to a redistribution of the world's wealth as a matter of fundamental fairness."<sup>6</sup> Such conflicting notions of fairness have fueled trade disputes in which the U.S. denounces government intervention and the lack of reciprocity and the developing countries cite the disparity in wealth between the developed and developing world. These differing perspectives were highlighted by a 1982 Rio de Janeiro newspaper editorial, which observed:

Brazil's import policy is now highly protectionist, of course, just what President Figueiredo and economic area officials have been complaining about in the industrialized world.

But there is a big difference between a developing nation such as Brazil closing its doors to imports in order to keep its foreign trade balance in surplus and an economic giant such as the U.S. or Japan cutting off imports from desperate and needy Third World nations.

The industrialized world must understand the great need for access to markets that most developing nations face. Protectionism in industrial nations is a selfish attempt to keep specific unproductive sectors afloat. Protectionism by developing nations is often the only way for the entire nation to remain solvent.<sup>7</sup>

5. Address by Vice-Minister of MITI to OECD Industry Committee (1970), reprinted in U.S. GEN. ACCOUNTING OFFICE, UNITED STATES-JAPAN TRADE: ISSUES AND PROBLEMS 176-77 (1979).

6. Komins, *Technical Analysis of the Group "Framework"*, 12 LAW & POL'Y INT'L BUS. 299, 306 (1980).

7. *Import Restrictions*, Latin American Daily Post, Sept. 30, 1982, at 4 (FBIS reprint). An editorial in *Jornal do Brasil* offered a similar perspective with respect to export subsidies:

Exports are decisive for the survival of some enterprises and for the success of our foreign trade strategy.

.....

Is Brazil granting subsidies? It is. But who does not? Is Brazil adopting a unilateral posture? It is. But is there anything more unjustly unilateral than the U.S. Trade Act?

... Brazil is willing to play for high stakes in defense of its interest—as the other international trade partners do, with greater or lesser reasons than Brazil.

*High Stakes*, *Jornal do Brasil*, June 13, 1978, at 10 (in Portuguese) (JPRS trans.).

The fact that the developing countries have secured recognition for their claim to special treatment within the GATT framework<sup>8</sup> underscores the weakening of the original GATT consensus regarding the nature of fair trade.<sup>9</sup>

In general, the GATT principles can no longer be said to form the basis for a common international understanding of fair trade. Nonintervention by governments in the market is not only renounced in principle by many governments, but quietly circumvented in practice even by some of the European nations party to the original GATT consensus.<sup>10</sup> The result has been the spread of an increasingly cynical attitude toward the underlying spirit of the original agreement, and a willingness to contravene that spirit when perceived national interests so require.<sup>11</sup> Thus, while it might be possible to return to the postwar consensus of "fairness" in trade, it is extremely dangerous for any nation to base its trade

8. Article XXXVI of GATT, added in 1964, provides in pertinent part that "[t]he developed countries do not expect reciprocity for commitments made by them in the negotiations to reduce or remove tariff and other barriers to the trade of developing countries. . . ." GATT, *supra* note 2, at art. XXXVI, ¶ 8. In addition, Article 14(4) of the Subsidies Code provides that "there shall be no presumption that export subsidies granted by developing countries' signatories, result in adverse effects, as defined in this Agreement, to the trade or production of another signatory." Agreement on Interpretation and Application of Articles VI, XVI, and XXIII of the General Agreement on Tariffs and Trade, done Apr. 12, 1979, 31 U.S.T. 513, T.I.A.S. No. 9619, —U.N.T.S.—. The effect of this provision has been to largely preclude the use of international dispute settlement procedures to challenge export subsidies by the LDCs. Graham & Rubin, *U.S. Trade Policy Toward Developing Countries*, in *MANAGING TRADE RELATIONS IN THE 1980s* 155–57 (T. Graham & S. Rubin eds. 1984).

9. Komins, *supra* note 6, at 310. The U.S. has responded to the needs of the developing countries by granting special duty-free treatment under the Generalized System of Preferences (GSP). Trade Act of 1974, §§ 501–505, 88 Stat. 2066, 19 U.S.C. §§ 2461–2465 (1982). However, the U.S. has been unwilling to concede to the developing countries the unfettered ability to create comparative advantage for their industries through state intervention. For example, developing country subsidy practices remain subject to the U.S. countervailing duty law, 19 U.S.C. §§1671–1671f (1982), which is considerably more stringent than the current provisions of the Subsidies Code. Graham & Rubin, *supra* note 8, at 156.

10. France, for example, has a long tradition of state intervention in the economy, and has implemented a variety of subtle policies designed to create a competitive edge for its export products. In the late 1970s, it stimulated its exports to developing countries through so-called mixed credit packages—the extension of extraordinarily lenient loans and development aid packages linked to purchases in France. On the average, each loaned franc led to exports to the developing country of two francs. *Mechanisms of French Export Subsidies*, *Neue Zürcher Zeitung*, Oct. 6, 1983, at 17 (in German) (JPRS trans.). However, as the *Neue Zürcher Zeitung* commented: "[M]any other countries have not been asleep and have parried the French mixed-credit system with similar programs. . . . [I]t now seems hardly likely that France could win this variety of the subsidy race, which it itself has provoked." *Id.* This is precisely the sort of escalating market intervention that the original GATT signatories hoped to end through a general agreement on competitive rules. See Jackson, *The Birth of the GATT-MTN System: A Constitutional Appraisal*, 12 *LAW & POL'Y INT'L BUS.* 21, 25–26 (1980).

11. Poland evaluated the comparative merits of various export-stimulating measures in 1981. The Polish journal *Zycie Gospodarcze* commented: "[S]ubsidizing [exports] violates the GATT resolutions signed by us. It is possible, however, to circumvent these regulations by using various kinds of loopholes—a return of profits from intermediary stages of production, a return of import tariff and turnover tax, [and] subsidizing not exports but unprofitable enterprises." *Profitability, Foreign Exchanges, Concessions*, *Zycie Gospodarcze*, Dec. 13, 1981, at 9 (in Polish) (JPRS trans.). When a system of international rules heavily dependent upon good faith compliance reaches the point where signatories probe for loopholes to justify conduct contrary to the basic spirit of the rules, arguably the system is no longer functioning.

policy on laissez-faire on the mistaken assumption that such a consensus exists today.

At present, in many industrial sectors, comparative advantage no longer determines competitive outcomes. The role of the state is more important. In such an environment, it is inadequate simply to invoke classic free-market nostrums when our industries suffer reversals in international competition; that is, to exhort them to become more competitive, or, alternatively, to accept the inevitability of their decline so that their resources may be redeployed to other sectors.

## II. ADEQUACY OF REMEDIES TO MARKET INTERVENTION

Proponents of laissez-faire do not deny that major distortions of the international market can be caused by foreign government intervention. They contend, however, that such distortions do not justify the rejection of the basic concept of free world trade. Instead, they argue that these distortions should be offset individually through negotiations, application of U.S. trade remedies, or redress under international agreements such as the GATT. This argument erroneously presupposes that currently available unilateral and multilateral remedies are equal to the task.

The inadequacy of the GATT dispute settlement procedures as practical remedies has long been apparent.<sup>12</sup> They are cumbersome and slow and, as one observer commented: "[A] 'foot dragger' has many procedural opportunities to slow down the process. In some circumstances a dispute, whether or not brought under the mechanism of article XXIII [of the GATT] continues for many years with no resolution."<sup>13</sup> In addition, selection of a neutral panel to arbitrate disputes is difficult;<sup>14</sup> the GATT standards, such as "nullification or impairment," are ambiguous;<sup>15</sup> and for U.S. industries, access to GATT remedies must be obtained through the U.S. government,<sup>16</sup> which, for various political and foreign policy reasons, may be unwilling to take up the cause in an international forum.<sup>17</sup> The GATT dispute settlement mechanism "had considerable promise in the early decades of GATT history; but in recent years, it has become apparent that the procedure is inadequate."<sup>18</sup>

12. See Jackson, *supra* note 10, at 42.

13. *Id.* The principal GATT dispute settlement mechanisms are provided under Articles XXII and XXIII. The various satellite agreements, such as the Agreement on Technical Barriers to Trade, *done* Apr. 12, 1979, 31 U.S.T. 405, T.I.A.S. No. 9616, —U.N.T.S.—, frequently contain their own resolution provisions.

14. Gadbow, *The Outlook for GATT as an Institution*, in *MANAGING TRADE RELATIONS IN THE 1980s* 44 (T. Graham & S. Rubin eds. 1984).

15. See R. HUDEC, *THE GATT LEGAL SYSTEM AND WORLD TRADE DIPLOMACY* 35–38 (1975).

16. Access to the GATT remedies is made available to private parties through the Trade Act of 1974, § 301, 19 U.S.C. § 2411 (1982), which directs the President to take "all appropriate and feasible action" to enforce U.S. rights under "any trade agreement." See Fisher & Steinhardt, *The Enforcement by Private Citizens of the United States under International Trade Agreements*, in *CURRENT LEGAL ASPECTS OF INTERNATIONAL TRADE LAW* 196 (P. Malrory & P. Suchman eds. 1982).

17. As Fisher and Steinhardt point out, the President's decision to act or refrain from acting in response to a § 301 petition "may have more to do with domestic publicity, congressional relations, and high foreign policy than the merits of the petition." Fisher & Steinhardt, *supra* note 16, at 196.

18. Jackson, *supra* note 10, at 41.

The unilateral remedies of U.S. trade law have proven only partially adequate as a practical response to foreign government intervention. Import relief, available under section 201 of the Trade Act of 1974,<sup>19</sup> is a sweeping remedy that frequently does little to offset the comparative advantage created by a foreign government. The specialized trade remedies, such as the antidumping and countervailing duty laws, tailored to offset specific foreign practices are effective in some specific instances, but they are so narrow in scope that they frequently fail to offset fully the effects of foreign promotional measures. Grant of relief under section 301 of the Trade Act of 1974<sup>20</sup>—a remedial statute which is broader in scope—is left to the discretion of the Executive, and the political and foreign policy considerations that usually influence such cases often ensure that no relief will be granted.<sup>21</sup> Moreover, all of these remedies suffer from a timeliness problem. Even in those cases where relief is granted, the response usually comes only after substantial injury to the industry has already occurred.

Finally, while negotiated settlements can ameliorate some of the effects of a foreign promotional program, the U.S. Government is not always in a position to obtain a satisfactory result.<sup>22</sup> Negotiations inevitably involve tradeoffs of various political and economic concessions. Relief may depend on the degree of intransigence of the foreign government and the number and magnitude of concessions sought by the U.S. Moreover, as with the application of trade remedies, negotiated settlements tend to be reached after substantial injury to a U.S. industry has already occurred.

### III. WORLD MARKET REALITIES

The competitive reversals suffered by U.S. industries in the 1970s and 1980s are regarded by many observers as verdicts of the market. U.S. firms have lost ground, it is said, because they are less efficient, less productive, and less innovative than their foreign rivals. This conclusion assumes that the world trading system is functioning as we believe that it should, rather than as it actually does. Recent international competitive developments illustrate the gap between the assumptions upon which our trade policy is predicated and world market realities.

#### *A. Erosion of the U.S. Steel Industry*

The U.S. steel industry, which has been seriously depressed since the 1970s, has been a frequent subject of analysis by proponents of international *laissez-faire*. The industry's import penetration levels rose from 12 percent in 1973 to 22 percent in 1982;<sup>23</sup> it has suffered from chronically low or negative earnings and

19. 19 U.S.C. § 2251 (1982).

20. 19 U.S.C. § 2411 (1982).

21. See Wolff, *The Challenge of Foreign Industrial Policy*, 15 NAT'L J. 354, 356 (1983).

22. One frequent outcome of negotiated settlements is so-called voluntary restraint agreements (VRAs) pursuant to which foreign countries agree to limit voluntarily their exports to the U.S.

23. See AM. IRON & STEEL INST., 1982 ANNUAL STATISTICAL REPORT 8 (1983).



inadequate capital investment.<sup>24</sup> According to most observers, if the industry does not become more competitive through equipment and plant modernization, it will shrink drastically, or disappear altogether. In the latter case, the industry's resources would be redeployed to sectors in which the U.S. enjoys a comparative advantage. Thereafter, nations which make steel more cheaply would become our suppliers. Similar solutions have been proposed for other U.S. industries which suffer international competitive reversals.

Unfortunately, this analysis is usually offered without regard to what the governments of our trading partners have done and are doing to support their steel industries. The U.S. steel industry faces numerous competitive disadvantages including aging plants, a fragmented structure, insufficient access to deep water transportation, and rising costs. However, many foreign steel industries have overcome or are overcoming comparable initial disadvantages through extensive government assistance. Comparative advantage in this sector has in many cases been created and sustained as much through governmental aid as entrepreneurial skill.

Most foreign steel industries exist today only as a result of deliberate government decisions to establish and expand steel production facilities through massive subsidies and government-backed debt financing. Japan, the world's leading steel exporter, created a modern steel industry between the 1950s and early 1970s through a combination of government loans and government-directed rationing of low-interest loan capital from private banks to steelmakers.<sup>25</sup> In the European Community, extensive government financial aid also facilitated the establishment and expansion of modern steel facilities in the 1960s and 1970s.<sup>26</sup> Finally, during

24. The Congressional Budget Office commented in 1982 that "if a firm loses profitability, it also loses the ability to generate funds to invest, and thereby finds it more difficult to be profitable in the future. Domestic steel producers have fallen into this downward spiral." STAFF OF THE HOUSE COMM. ON ENERGY AND COMMERCE, 97TH CONG., 2D SESS., *THE STEEL INDUSTRY IN TRANSITION* 35 (Comm. Print 1982) [hereinafter cited as STAFF REPORT].

25. Interest rates in Japan were held at artificially low levels by regulation, creating an excessive demand for loan capital. This "normalized the practice of credit allocation" by the Bank of Japan (Japan's central bank) to private banks. ECONOMIC RESEARCH DEP'T, BANK OF JAPAN, *THE JAPANESE FINANCIAL SYSTEM* 60 (1978). "[I]n the adjustment of debenture flotation and the granting of credit by the Bank of Japan, priority was given to supplying funds to export industries and the key industries." Subcomm. on Industrial Finance Problems of the Central Division Committee, Council on Industrial Structure, Report on Desirable Industrial Financing in the Future (Sept. 29, 1982), translated in JPRS Doc. No. JAR-84-005, Mar. 21, 1984, at 9. The Japanese steel industry enjoyed such priority status in the 1960s and 1970s. The U.S. Office of Technology Assessment (OTA) attributed the Japanese steel industry's comparatively high percentage of efficient continuous casting equipment to the fact that "the Japanese government and banking system have channeled sufficient capital at favorable interest rates to the Japanese industry." U.S. OFFICE OF TECHNOLOGY ASSESSMENT, *TECHNOLOGY AND STEEL INDUSTRY COMPETITIVENESS* 326 (1980); see also U.S. GEN. ACCOUNTING OFFICE, *supra* note 5, at 185.

26. The Italian government, for example, virtually created Italy's integrated steel industry through financing arranged by the state holding company, IRI. By 1977, the principal state-owned steel producer, Italsider, had a debt-to-equity ratio of 14:1. See Biringuccio, *Steel is Dying of Billion-Poisoning. Root Causes of Italsider's Multiple Ailments*, *Il Borghese*, Nov. 22, 1981, at 761-64 (in Italian) (JPRS trans.). The rapid expansion and modernization of the French steel industry in the 1960s and 1970s was made possible by a combination of direct government loans (many subsequently forgiven) and state-backed financing from the private sector. C. Stoffaes and P. Gadonneix, Officials

the past decade, in numerous newly-industrializing countries such as Brazil<sup>27</sup> and the Republic of Korea (ROK or South Korea),<sup>28</sup> government subsidies, loans, and loan guarantees have made possible the import of modern equipment and the establishment of major steel production facilities which, in a purely laissez-faire environment, probably could not have been built.

The decision to expand steel production capacity, made concurrently by governments in many advanced and developing countries in the 1960s and early and mid 1970s, resulted in an extraordinary expansion of worldwide steelmaking capacity through the 1970s. When the long-term growth of world steel demand began to level off unexpectedly in 1974, the ultimate result was massive global overcapacity, a problem which has become even more acute in this decade.<sup>29</sup>

In a true laissez-faire world trading environment, such overbuilding would have resulted in a shakeout. Market forces would have eliminated excess capacity by forcing the less efficient producers out of business or into major retrenchment, leaving the more efficient producers to supply the world market. Indeed, many observers of the U.S. steel industry's current problems believe that such a process is occurring, and conclude that the U.S. industry must become more efficient or disappear. These observers assume that the steel industry is functioning according to the theory of comparative advantage. In fact, the industry's current dilemma offers a classic illustration of how the theory of comparative advantage can be frustrated in practice.

The U.S. steel industry would have experienced difficult times during the past decade regardless of the nature of foreign competition. A depressed demand during much of that period was exacerbated by the severe recession in 1982-83. To a considerable degree, however, the U.S. steel industry's international competitive problems since 1974 are attributable to decisions by the governments of other steel-producing nations to interfere with the operation of the market. Those nations deemed the unemployment and economic dislocation which would result from a shutdown of a portion of their steel industries unacceptable.<sup>30</sup> Un-

of the French Ministry of Industry, State and Steel in France, Report No. 3 (delivered at seminar held by the International Center of Research and Information on Public and Cooperative Economy, Liege, Belgium, Sept. 18-20, 1980). In addition to such national aid measures, the authorities of the European Coal and Steel Community (ECSC) extended over \$5 billion in low-interest loans to European steel producers between 1952 and 1982. EUROPEAN COAL AND STEEL COMMUNITY, 1982 *Financial Report*. The Netherlands and West Germany, whose steel industries have been established largely without government assistance, have repeatedly protested the steel subsidies of their Community neighbors.

27. See *Expansion Go-Ahead for Siderbras*, Metal Bull., Sept. 4, 1981, at 35; *Brazilian Steel Booms*, Metal Bull., Oct. 21, 1980, at 39; *Brazil Investment Plans*, Metal Bull., Dec. 15, 1978, at 40; *Annual Investments in Steel: \$3.5 Billion Through 1981*, O Globo, Apr. 6, 1978, at 22 (in Portuguese) (JPRS trans.); *Greater National Participation in Iron-Steel Plan Foreseen*, O Estado de São Paulo, May 29, 1977, at 61 (in Portuguese) (JPRS trans.); *Problems of National Steel Industry Aired*, O Estado de São Paulo, June 8, 1975, at 70 (in Portuguese) (JPRS trans.).

28. See KOREAN DEVELOPMENT BANK, *INDUSTRY IN KOREA 52-58* (1976); *POSCO Gets New Ultra-modern Furnace*, Korea Herald, Feb. 18, 1981, at 1.

29. See generally INT'L IRON & STEEL INST., *A HANDBOOK OF WORLD STEEL STATISTICS* (1983).

30. In France, Italy, and Belgium, proposals to close uneconomic steel facilities have regularly triggered violent social unrest in steel producing regions. As a result, the governments of these countries have frequently extended additional financial aid to the industry to sustain uneconomic

economic steel producers were subsidized, protected from imports, and encouraged to maintain high domestic prices while disposing of their surplus production in export markets.

In the EEC, where about one-third of U.S. steel imports originate, most major integrated steel producers have suffered chronic, major operating deficits since 1975. European governments have engaged in a subsidy race<sup>31</sup> or "subsidy steeplechase"<sup>32</sup> to pump government funds into ailing steel producers. In some cases, periodic subsidy injections have been required simply to enable these companies to meet their payrolls and continue day-to-day operations.<sup>33</sup> In 1982 the West German Iron and Steel Industry Association estimated that between 1975 and 1983 the governments of Belgium, the United Kingdom, France, and Italy had collectively granted or would grant more than \$30 billion in subsidy funds to their steel industries.<sup>34</sup>

The impact on international competition was inevitable. In order to maintain domestic employment levels, subsidized steel firms have continued high rates of operation, despite stagnant demand. Surpluses have been exported, often at a loss. The result is the phenomenon known as "social tons"—steel sold below the cost of production in foreign markets in order to maintain employment at home.<sup>35</sup> Because the continued ability to export "social tons" is ultimately dependent upon the flow of subsidies, this phenomenon has the effect of pitting privately owned, unsubsidized firms against national treasuries.<sup>36</sup> *Wirtschaftswoche* commented on April 6, 1984:

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production. See *Crisis of the Benelux Steel Industry*, *Neue Zuercher Zeitung*, Oct. 21, 1977, at 11 (in German) (JPRS trans.); *The Sinking of the Steel Industry*, *L'ESPRESSO*, June 26, 1983, at 152-55 (in Italian) (JPRS trans.); *More Unrest as France Confirms Job Cuts*, *Metal Bull.*, Oct. 1, 1982, at 29. Between 1978 and 1982 the West German government poured approximately \$1 billion into the ailing Saarland steel industry. See *The Limit Has Been Reached*, *DER SPIEGEL*, Nov. 8, 1982, at 67, 69 (in German) (JPRS trans.). According to the Saarland Minister of Finance, "the issue is simply this: what is cheaper—to subsidize wages or to finance unemployment?" *Unemployment or Wage Subsidy*, *Frankfurter Allgemeine*, Dec. 8, 1982 at 12 (in German) (JPRS trans.). In Belgium, proponents of subsidies argued that "it would be much cheaper for the state to subsidize a job in the steel industry at approximately 200,000 Belgian francs than it would be to support an unemployed person at as much as 500,00 Belgian francs annually." *EC Commission Criticizes Belgium's Aid to Steel Industry*, *Neue Zuercher Zeitung*, Jan. 14, 1981, at 13 (in German) (JPRS trans.).

31. *German Anger on Subsidies Grows*, *Metal Bull.*, Apr. 3, 1981, at 27.

32. *Brussels's Blessing for EC Subsidies for Steel Industry. Producers Hard-Pressed in France, Belgium, and Italy*, *Neue Zuercher Zeitung*, Jan. 7, 1982, at 13 (in German) (JPRS trans.).

33. *Funds for Cockerill-Sambre?*, *Metal Bull.*, Sept. 15, 1981, at 33; *New Cash Crisis for Italsider*, *Metal Bull.*, Sept. 4, 1981, at 33; *Hainaut-Sambre Bailed Out*, *Metal Bull.*, Apr. 16, 1981, at 27; *Holdings Rethink Belgian Rescue*, *Metal Bull.*, Aug. 15, 1980, at 33; *Walloon Steel Industry Faces Shortage of Funds*, *Le Soir*, July 9, 1980 at 1 (in French) (JPRS trans.).

34. *Wirtschaftsvereinigung Eisen-Und Stahlindustrie*, *Practical Experience with Governmental Assistance to the Steel Industry of the European Community* (Feb. 1982) (unpublished report) (copy on file, Michigan Yearbook of International Legal Studies).

35. Cockerill, Belgium's largest steel producer until 1981, reported that the reduced volume of orders from the EEC forced the company in 1977 to increase its marketing effort in more distant countries. The company also reported that the desire to maintain a reasonable level of activity in its plants compelled it on several occasions to accept orders where the price did not cover fixed production expenses. See *COCKERILL, 1977 ANNUAL REPORT* (U.S. Steel Law Dep't trans.).

36. As the chairman of one privately-owned West German firm complained bitterly in 1983: "The

In the EC as a whole, almost half a million jobs are provided for by steel, and this is the case above all in the structurally weak regions. With that, politics automatically comes into play. Instead of leaving it up to the market to correct excess capacities, reference was made to the employment policy aspect to justify reaching deeply into the pockets of the EC states. Since 1975, about 80 billion marks have been pumped above all into the nationalized portion of the steel industry for its support. . . . By way of the initial subsidizing of weak borderline suppliers, eventually the sound companies entered a state of crisis. With public financial aid amounting to as much as 200 marks per ton of steel—which is nearly equivalent to the labor costs—they could no longer hold their own in the competition.<sup>37</sup>

National coffers are not inexhaustible and the European steel subsidies have strained some badly.<sup>38</sup> Nevertheless, private companies, no matter how efficient, cannot prevail against this kind of competition. In Europe, some highly competitive, privately owned firms have already been driven out of business by their subsidized rivals;<sup>39</sup> others have been given major subsidies in an effort to keep them in the market.<sup>40</sup> Subsidized and dumped European steel has posed a fundamental competitive dilemma for the U.S. steel industry.<sup>41</sup> It must match Euro-

[steel] competitors in Italy, France, Belgium and Great Britain have been artificially kept alive since 1975 with subsidies of about 80 billion marks in tax funds. No private enterprise can in the long run compete against the combined ministers of finance of Europe." *Now We Are Fighting for Survival. Thyssen-Chief Dieter Spethmann on the Crisis in the Steel Industry and State Subsidies*, DER SPIEGEL, May 23, 1983, at 32–42 (in German) (JPRS trans.).

37. *Rationalization Pressures May Ease*, Wirtschaftswoche, Apr. 6, 1984, at 12–15 (in German) (JPRS trans.).

38. In 1981 a Dutch delegate to the European Parliament commented that the effect of Belgian steel subsidies "on the Belgian budget will be felt up to the year 2005, and will place an enormously heavy burden on the next generation. . . . [This aid] is merely being cast into a bottomless pit which is getting bigger day by day. . . . What we have here is a classic instance of the use of government subsidies to distort competition." 1981–1982 EUR. PARL. DEB. (No. 271) 110 (May 6, 1981).

39. For example, in early 1983, a number of steel firms controlled by entrepreneur Willi Korf began insolvency proceedings in a West German court. Korf's firms were considerably more efficient than the large state-owned and subsidized firms. Korf blamed his problems in large part on the fact that prices were forced down by subsidized competitors. *See More Korf Companies Seek Protection*, Metal Bull., Jan. 21, 1983, at 23; *Korf-Stahl Joins Rush to Court*, Metal Bull., Jan. 18, 1983, at 23; *Badische Breaks with Korf*, Metal Bull., Jan. 14, 1983, at 23; *Korf's House of Cards*, Metal Bull., Jan. 14, 1983, at 25; *Korf Goes to Court for Debt Settlement*, Metal Bull., Jan. 11, 1983, at 31.

40. In 1981, West Germany, which had traditionally avoided massive subsidization, announced its commitment to a 1.8 billion DM subsidy program, stating: "The Federal Government is not prepared to accept the fact that massive distortions of competition threaten German jobs, which over the long run are competitive on an international scale, and endanger the very existence of our steel industry." Decision of the Federal Government on the German Steel Industry, W. Ger. Press & Information Office, Bulletin No. 72, S.623 (1981) (in German) (U.S. Steel Law Dep't trans.). Similar aid programs were launched in the Netherlands and Luxembourg, which had previously avoided large-scale subsidization. *See Steel: In Luxembourg, Aids to the Steel Industry will be Partly Financed by an Increase in Direct Taxes*, Europe, No. 3588 (New Series), Apr. 15, 1983, at 14; Comm'n of the European Communities, Preliminary Study of Steel Aids 4 (Nov. 1982).

41. The U.S. International Trade Commission has repeatedly found that the U.S. steel industry has been injured by dumped or subsidized European steel products. *See, e.g., Certain Steel Products From Belgium, Brazil, France, Italy, Luxembourg, the Netherlands, the United Kingdom, and West Germany*, 47 Fed. Reg. 9087 (1982).

pean prices, which are uneconomically low, or maintain its own price levels and surrender its market share to foreign rivals.<sup>42</sup>

U.S.-EC competition in steel illustrates how the operation of comparative advantage can be frustrated. U.S. steel firms once enjoyed a cost advantage over most European firms in the U.S. market due in part to freight and other costs which the Europeans incurred simply to deliver their products to American buyers.<sup>43</sup> Over the last decade, that cost advantage has disappeared because competing European firms can consistently underprice U.S. firms without concern for recovering their own costs.<sup>44</sup> While improvements in efficiency and productivity are goals which the industry certainly must pursue, such improvements may be irrelevant to competitiveness in an environment where the volume of subsidies, rather than comparative efficiency, may ultimately determine competitive outcomes.

Japan and South Africa have developed their own solutions to the phenomenon of global steel overcapacity and heavy subsidization. They have encouraged or condoned the virtual sealing off of their domestic steel markets to undesired imports, thus largely avoiding the issue of how to compete against subsidized foreign steel at home.<sup>45</sup> Domestic prices are stabilized through cartel agreements

42. The U.S. steel industry is criticized for pricing to cover its average costs in the domestic market, thereby losing market shares to foreign rivals who price to cover only marginal costs. See, e.g., Borrus, *The Politics of Competitive Erosion in the Steel Industry*, in *AMERICAN INDUSTRY IN INTERNATIONAL COMPETITION* 78 (J. Zysman & L. Tyson eds. 1983). This might be valid criticism if the foreign producers were, like their U.S. counterparts, privately-owned firms that had to cover their average costs over the long run in order to remain competitive. Significantly, those U.S. firms that have deliberately met import prices for a sustained period—such as Armco Steel with its so-called "Foreign Fighter" program—have experienced disappointing results. The Armco program, employed at its Houston mill through the late 1970s, matched foreign steel import prices but resulted in chronic operating losses for the plant. The Houston mill was finally shut down in 1982. See *ARMCO STEEL, 1982 ANNUAL REPORT*; U.S. Int'l Trade Comm'n Inv. No. 731-TA-18/24, at 39-40 (1980) (statement of Eugene L. Stewart) [hereinafter cited as Stewart Statement].

43. Paine Webber calculated in 1984 that the landed per ton cost of French and West German steel was still higher than the average per ton cost of U.S.-made steel, despite the overvalued dollar. *AM. IRON & STEEL INST., STATE OF THE AMERICAN STEEL INDUSTRY* 30 (1984) (citing PAINE WEBBER, *WORLD STEEL DYNAMICS* (Feb. 1984)).

44. Paine Webber estimates that the steel producers of France and Great Britain suffered a pretax loss on every ton of steel shipped in between 1976 and 1983. The average-per-ton loss was estimated at \$67.38 and \$70.24 for France and Britain, respectively. *Id.* at 55. A staff member of the U.S. I.T.C. commented in 1980 that European government financial aid enabled "those steel industries to sell steel at less than the cost of production over the long run. . . . Many steel operations in Europe would close today if they had to sell at cost." Stewart Statement, *supra* note 42, at 42-43.

45. Through 1984 South Africa required issuance of government permits for steel imports which were "almost never granted." *South Africa Faces 'Import Flood' Warning*, *Metal Bull.*, Dec. 13, 1983, at 23. In Japan, distribution of about 90 percent of the steel consumed domestically is handled by the large trading companies (*sogo shosha*) which "refrain from dealing in imports of steel materials because of pressure from blast furnace steelmakers, particularly Nippon Steel Corp." *New Twist in Trade Friction: Japan the Victim*, *ORIENTAL ECONOMIST*, Feb. 1983, at 10, 13; see also *Steel Companies are Starting to Experience 'Boomerang Effects'*, *Japan Econ. J.*, Dec. 8, 1981, at 15. As a result, imports have never accounted for more than about four percent of Japan's domestic consumption. This small percentage has often been smuggled into the country to avoid retaliation. The Japanese magazine *Nikkei Business* reported on February 22, 1982 that South Korean importers had stopped delivering their steel at Tokyo, switching instead to a covert night operation at Osaka where the steel was secretly off-loaded from freighters onto barges and covered with sheeting: "That is

or government regulation, and during domestic slump periods, surpluses are exported at discount prices.<sup>46</sup>

The experience of the domestic steel industry undercuts the wisdom of the argument that the solution to such distortions is to invoke existing trade remedies to restore the "level playing field." This industry has resorted to trade remedies more than any other during the past decade.<sup>47</sup> These remedies' repeated application has not prevented the progressive erosion of the industry's domestic market by subsidized and dumped foreign steel.

because, in the case of Tokyo, the cargo is followed by trucks (belonging to trucking enterprisers who are under the control of the influential manufacturers) and the users become known. In the case of Osaka, it is possible to evade the pursuit of trucks, if the cargo is placed on a barge and it meanders through the canals." *Non Tariff Barriers—Techniques for Evasion*, NIKKEI BUSINESS, Feb. 22, 1982 (in Japanese) (U.S. Embassy, Tokyo trans.) (no page given). *Nikkei Business* adds, perhaps unnecessarily, that "this is a full-fledged non-tariff barrier, without a doubt." *Id.*

46. Japanese steel firms have stabilized domestic prices through formal legal cartels and informal "administrative guidance" from the Ministry of International Trade and Industry (MITI). In 1975–76, the curtailment of domestic production pursuant to collusive restrictions on output led to a surge of low-priced Japanese steel exports, provoking trade disputes with the United States and the European Community. See *Steel Market Getting Out of Stalemate*, Nihon Keizai, Feb. 23, 1976, at 13 (in Japanese) (U.S. Embassy, Tokyo trans.); *Exports of Iron and Steel to U.S. and China Turn Upwards*, Nihon Keizai, Nov. 23, 1975, at 6 (in Japanese) (U.S. Embassy, Tokyo trans.); *MITI Revises Outlook on Demand and Supply of Iron and Steel during October–December Period*, Nihon Keizai, Nov. 11, 1975, at 7 (in Japanese) (U.S. Embassy, Tokyo trans.). This was no aberration, but a reflection of a typical recessionary pattern. As *Nihon Keizai* explained on June 12, 1974:

After 1961, [Japanese] iron and steel exports increased in the years 1962, 1965, 1968 and 1971, when the country was in a period of recession or retrocession. . . . [T]he manufacturers sought an outlet for surplus production, which was caused by a decline in demand at home, in the expansion of exports. Moreover, overproduction in Japan reached serious proportions in any period of recession, because equipment investments had been increased greatly in time of prosperity. The manufacturers, therefore, tried to expand exports, even by reducing export prices to a level lower than the prices on the home market. As a result, they were suspected of dumping by importer nations.

*Iron and Steel Exports on Crest of Boom*, Nihon Keizai, June 12, 1974 (in Japanese) (U.S. Embassy, Tokyo trans.) (no page given). The situation in South Africa is similar. As the *Financial Mail* reported on December 4, 1981:

In recent years local production has surpassed demand. The surplus is disposed of abroad at prices below the domestic ones to help recoup capital costs. . . . South African steel marketing strategy is thus similar to that of most other producers: namely, to sell at production-related costs at home, to check imports wherever possible, and to cut the competition to ribbons abroad. Local steelmen claim it could not be otherwise. 'How could we be lily-white champions of free enterprise while others play the game by a different set of rules?' asks one. 'At present you can safely say that anyone who sells on international markets is dumping.'

*Pricing for Future Profits*, *Fin. Mail*, Dec. 4, 1981, at 1174.

47. In 1977, U.S. steel producers filed 21 antidumping complaints against Japanese and European producers. Concerned about the administrative burden of processing so many complex cases and the implications of the cases for ongoing multilateral trade negotiations, the U.S. government implemented the so-called Trigger Price Mechanism (TPM) in 1978 as an alternative to individual trade cases. The TPM established a set of minimum "trigger" prices against which the U.S. government monitored the price levels of steel imports: imports below trigger prices would result in government initiation of expedited antidumping investigations. Trigger prices were set by reference to costs of Japanese producers. The TPM enabled higher-cost European mills to sell below their own costs in the U.S. market. As a result, U.S. producers filed another round of antidumping complaints in 1980. By late 1981, it was evident that the TPM had failed as a deterrent to dumping. It was suspended in early 1982.

The problem, in part, is that these are reactive remedies; they cannot be invoked until evidence of material injury is available. By the time such evidence can be gathered, presented to the government, and acted upon, substantial additional injury can occur. Even the most efficient remedies, the antidumping and countervailing duty laws, are cumbersome. They must be invoked against specific countries and product categories, even though this may entail the costly filing of dozens of complaints at one time.

In the spring of 1981, an influx of low-priced European steel began, much of it obviously dumped or subsidized.<sup>48</sup> Evidence of deep, widespread, price undercutting had accumulated by late summer and early fall, and import penetration rates were increasing rapidly, but American steel firms and the U.S. Government refrained from commencing trade actions because sufficient evidence of injury had not yet been accumulated.<sup>49</sup> In October, an executive of one U.S. firm complained that "from what we can see, the government won't be able to find injury until possibly February, by which time it won't do us any good."<sup>50</sup>

In fact, the first trade actions—five countervailing duty investigations initiated by the Commerce Department—did not commence until November 1981. Meanwhile, steel imports had increased from 12.3 percent in March to 25.8 percent in November.<sup>51</sup> This influx occurred simultaneously with a major recession in domestic steel demand in mid and late 1981. Between September and November 1981, U.S. steel producers closed more than 23 plants and laid off nearly 50,000 workers. These actions were attributed in significant part to price suppression and sales lost to imports.<sup>52</sup> U.S. steel producers finally filed an array of countervailing duty and antidumping complaints in January 1982. In response to those petitions, the U.S. Government began to impose trade sanctions on the European producers in mid 1982, over a year after the import surge had begun. Although these sanctions ultimately led to a U.S.-EEC negotiated settlement in October

48. See *Steel Distributors Question Future of Trigger System*, Am. Metal Market, June 16, 1981, at 1; *Customs Service Investigating Alleged Steel Import Frauds*, Am. Metal Market, June 15, 1981, at 1; *Europeans Seen Challenging Triggers*, Am. Metal Market, June 1, 1981, at 5. One French producer, Usinor, openly announced that it was selling steel in the U.S. below TPM levels.

49. See *Soft Market, Import Prices Causing U.S. Producers of Wire to Discount*, Am. Metal Market, Oct. 7, 1981, at 1; *Steel Imports in Great Lakes Rising, Prices Below Trigger*, Am. Metal Market, Oct. 6, 1981, at 1; *SSCI Seeks Aid to Plug Trigger System Loopholes*, Am. Metal Market, Sept. 16, 1981, at 1; *Commerce Steps Up Foreign Steel Probe*, Aug. 18, 1981, at 1; *Fourth Quarter Triggers, Extras to Hold*, Am. Metal Market, Aug. 17, 1981, at 5; *Low-Priced Sheet, Strip Hit U.S.*, Am. Metal Market, Aug. 4, 1981, at 1.

50. *Stricter Enforcement of Trigger System Sought by Producers*, Am. Metal Market, Oct. 1, 1981, at 1, 16.

51. See AM. IRON & STEEL INST, APPARENT SUPPLY OF STEEL MILL PRODUCTS (NET TONS), Dec. 1981, at 1, 2.

52. See *Steel Firms Cut Output, Increase Layoffs*, Am. Metal Market, Oct. 26, 1981, at 5, 30; *Bethlehem, Ford Cutback Operations*, Metal Bull., Oct. 23, 1981, at 31; *Market Slump Brings Further Round of Cuts*, Metal Bull., Oct. 16, 1981, at 35; *Roderick Threatens Anti-Dumping Action*, Metal Bull., Oct. 13, 1981, at 31; *West Coast Steel Slump Deepens as Imports Set Record in East*, Am. Metal Market, Oct. 9, 1981, at 1; *Weak Demand Hits U.S. Majors*, Metal Bull., Oct. 9, 1981 at 31; *Steel Mills Balancing Output to Market, Layoffs Growing*, Am. Metal Market, Oct. 5, 1981, at 5; *Some Pittsburgh Producers Cutting Back*, Am. Metal Market, Sept. 28, 1981, at 8; *S&L Agrees to Buy 5 Pedco Mills*, Am. Metal Market, Sept. 10, 1981, at 1.

1982 in which the Community agreed to restrain its steel exports voluntarily, substantial injury to the industry had already occurred.<sup>53</sup> Moreover, no sooner had the U.S.-EC voluntary restraint agreement (VRA) been concluded than a new surge of low-priced imports developed from newly industrializing countries like Brazil, Mexico, and the ROK.

Trade complaints did not forestall substantial injury to the U.S. steel industry in 1981-82, and they have done even less to offset the long-run competitive imbalance created by foreign government intervention. To remain competitive in the 1980s and 1990s, the U.S. steel industry must undergo intensive modernization. Yet, because of its consistently low earnings, it has not been able to generate the required capital.<sup>54</sup> American critics frequently point to the industry's low level of investment.<sup>55</sup> In the European community where operating losses have been far heavier than in the U.S., an intensive investment and modernization program is being funded by tens of billions of dollars in government subsidies and low-interest loans.<sup>56</sup> As a result of such subsidies, firms which have suffered heavy losses each year since 1975—and which would be deemed uncreditworthy in private capital markets—are reaching a level of modernization that may prove unattainable for U.S. steel firms.<sup>57</sup>

It should be evident that at least in this industrial sector, fair trade, as we understand that term, has not existed for some time. The market is distorted; factors such as subsidies, cartels, and closed home markets, rather than com-

53. The U.S. I.T.C. made numerous preliminary findings—by product line and by country—that the U.S. steel industry had been materially injured by imports. See, e.g., U.S. Int'l Trade Comm'n, *supra* note 41.

54. In 1981 the Congressional Budget Office reported: "Just to maintain [U.S. producers'] facilities—or replace them as they physically depreciate on a 25-year cycle—requires capital expenditures in steelmaking of between \$4 billion and \$5 billion per year, by the industry's estimate. Because of poor prospective returns from investment the integrated industry has not attained this level of investment since 1970." STAFF REPORT, *supra* note 24, at 5.

55. *The Re-making of Japan's Major Corporations—Nippon Steel*, Japan Econ. J., Apr. 17, 1984, at 7; *Rationalization Pressures May Ease*, WIRTSCHAFTSWOCHE, Apr. 6, 1984, at 12-15 (in German) (JPRS trans.). U.S. Steel's acquisition of Marathon Oil in 1982 demonstrates that the industry does not invest in steel even when funds are available. The acquisition was financed with debt which could be raised for an investment in oil—an industry with a strong earnings record. It is unlikely these funds could have been raised, at least on acceptable terms, for an investment in steel. Steel has become such an unprofitable enterprise worldwide that privately-owned producers in West Germany and Japan are also diversifying into more profitable lines to improve their overall earnings posture.

56. Between February 1980 and April 1983 the European Commission approved or had pending before it proposals from European governments requesting over \$25 billion in state aid to national steel industries. Comm'n of the European Communities, *Fourth Report on the Application of the Rules of Aids to the Steel Industry* annex 1, 1983 COM 173 final.

57. For example, an important measure of industry modernization is the percentage of steel made through the highly efficient continuous casting process. In 1983 about 26 percent of U.S. crude steel production was continuously cast. By contrast, the Belgian steel industry, which has suffered disastrous operating losses since 1975, will enjoy a continuous casting ratio of 76 percent in 1985 as a result of an intensive investment program. Belgian steel subsidies between 1980 and 1983 have been estimated by the West German Iron & Steel Industry Association at about \$3 billion (estimate converted from Deutschmarks at 2.43:1). See EUROPEAN COAL & STEEL COMMUNITY, INVESTMENT IN THE COMMUNITY COALMINING AND IRON AND STEEL INDUSTRIES 29 (1982); *Time Runs Out for Steel*, BUS. WEEK, June 13, 1983, at 84; Wirtschaftsvereinigung Eisen-und Stahlindustrie, *supra* note 34, at 21.



parative efficiency, determine competitive outcomes. In such an environment, it is inadequate simply to urge U.S. companies to become more competitive or to invoke traditional trade remedies.

However, the suggested alternative response, that we allow those countries which have invested heavily in steel to dominate that sector and move the resources currently used in our traditional manufacturing industries into knowledge-intensive high technology sectors in which we enjoy a comparative advantage, is also inadequate. The problem of foreign mercantilism cannot be overcome so easily. Government intervention also affects competitive outcomes in high technology, and the trade remedies, which have proven imperfect in traditional sectors, are arguably even less effective in the volatile high technology fields.

## B. THE HIGH TECHNOLOGY INDUSTRIES

Conceptually, government intervention on behalf of particular high technology sectors differs little from classic mercantilism. In both, intervention creates a comparative advantage for a national industry that would not be possible in a pure laissez-faire environment. However, the nature of competition in high technology sectors varies considerably from that in the traditional manufacturing industries. The emerging forms and effects of government intervention have revealed that multilateral and unilateral trade remedies are even worse suited to deal with mercantilism in the high technology area.

Comparative advantage in high technology is determined by the speed and effectiveness with which producers can develop and subsequently commercialize technological innovations. In some cases, state intervention can actually retard this process by stifling innovative initiative through bureaucratic control and excessive centralization. On the other hand, as the Japanese example shows, government aid carefully administered at key junctures in the developmental process can enhance comparative advantage and produce strikingly successful results in the international market in a remarkably short period.

Development of wholly new technologies requires substantial initial investments in research and development, followed by intensive capital investments in the production equipment needed to commercialize the resulting technologies.<sup>58</sup> However, because the technology is new, demand for the product is uncertain, making large research and production investments a risky proposition.

The nature of the competition when the product is commercialized increases the risk. Producers in a number of high technology industries have discovered that the unit cost of production declines in a predictable ratio as their cumulative volume of output increases. This "learning curve" places a premium on entering the market early and achieving a high sales volume quickly.<sup>59</sup> As one U.S.

58. The U.S. semiconductor industry, for example, invests between 22 and 27 percent of its annual earnings in research and development and plant and equipment, compared with the average of about nine percent for U.S. manufacturing industries generally. SEMICONDUCTOR INDUS. ASS'N, *THE INTERNATIONAL MICROELECTRONIC CHALLENGE* 24 (1981).

59. This phenomenon was observed in U.S. aircraft production plants during World War II and was subsequently articulated by the Boston Consulting Group. See BOSTON CONSULTING GROUP,

semiconductor executive put it: "A year's advantage in introducing a new product or new process can give a company a 25 percent cost advantage over competing companies; conversely, a year's lag puts a company at a significant disadvantage with respect to its competitors."<sup>60</sup>

This dynamic tends to produce intense price competition culminating in the emergence of several market leaders:

The basic objective in pricing a new product should be to prevent competitors from gaining experience and market share before the new product has achieved major volume. If this is done, it is possible to achieve a cost advantage over competition which cannot profitably be overcome by any normal performance on the part of competitors.<sup>61</sup>

Government intervention can influence this competitive process in several ways. First, governments may directly or indirectly provide some of the funding needed for the research, development, and commercialization of new products. As technologies become more complex, capital demands increase, and such aid becomes an increasingly important means of eliminating this initial hurdle. Second, governments can reduce some of the risks faced by producers commercializing new products by ensuring that a demand will exist for them when they are developed. This can be done by protecting the domestic market<sup>62</sup> or by guaranteeing that the government will procure the new products.<sup>63</sup> The initial sales

PERSPECTIVES ON EXPERIENCE 10-36 (1970). It has formed the basis for marketing strategy in a number of high technology industries. A strategy based on the learning curve is most applicable to high volume commodity-type high technology products like calculators, semiconductors, optical cable, and some machine tools, where price is an important customer consideration. It is less significant in sales of large computer and telecommunications systems where price is not an overriding customer concern.

60. CHARLES RIVER ASSOCIATES, *INNOVATION, COMPETITION AND GOVERNMENT POLICY IN THE SEMICONDUCTOR INDUSTRY* 4-10 (1980) (quoting Robert Noyce).

61. BOSTON CONSULTING GROUP, *supra* note 59, at 41.

62. Brazil is currently establishing a computer industry within a protected domestic market. Brazilian industrialist Salvador Perotti described the benefits of such protection in the São Paulo *Veja*:

"A few years ago, we imported everything and today we are already manufacturing microcomputers, minicomputers, disks, printers and terminals," said Perotti. According to him, and practically all the industrialists in the sector, the Brazilian leap is due mainly to the protected market. He explains: without the protected market, the foreign industries would be in a position to manufacture and sell in Brazil computers identical to the ones manufactured by Brazilian industry at a price that Perotti estimates would be four times less. "That would decimate our industry, which is beginning to establish itself," he said.

*Proceedings of Third Informatics Fair Reported*, *Veja*, Oct. 26, 1983, at 86-89 (in Portuguese) (JPRS trans.).

63. Louis Mexandeau, France's Minister of Posts and Telecommunications, commented on June 16, 1983:

Only about 10 years ago, we French realized that the PTT was becoming one of the linchpins of the French electronics industry through government purchasing and use of the telephone network. . . . A French telephone industry has been built gradually through a policy of government purchasing.

This industry has now acquired international standing, and its influence has spread far beyond the telephone alone. While an industry like office formation systems is running a trade deficit of Fr 3.5 billion, telecommunications have registered FR 2 billion in surplus. The attachment of PTT to the Industry ministry is the indirect result of this successful industrial

volume from a protected source of demand makes cost reductions, vital for successful international competition, possible.

Competition between the U.S. and Japan in high technology illustrates how decisively government measures can affect competitive outcomes. Japan, which trailed the U.S. in virtually all high technology sectors in 1970, has pulled abreast in some product areas (semiconductors) and is arguably leading in some others (industrial ceramics, fiber optics electronics). That fact reflects Japan's successful extension of promotional policies once employed in industries like steel into the high technology sectors. Japan protects its infant high technology industries as long as they are competitively inferior to U.S. counterparts.<sup>64</sup> The "nurturing" process involves government-subsidized and supervised joint research and development projects, financial incentives for investment, and, in some cases, government procurement of new products on highly favorable terms. When this process proves successful, it enables a Japanese industry to achieve international competitive parity or superiority within a comparatively short time—at which point access to the domestic market is liberalized and the Japanese commitment to open markets and free trade in the sector is emphasized. In effect, this system prevents *laissez-faire* international competition until Japanese firms enjoy a comparative advantage, or at least competitive parity. The model has been successful for Japan and is now being emulated by other governments eager to create comparative advantage for their own high technology industries.<sup>65</sup>

The semiconductor sector offers the classic example of how the Japanese approach has succeeded in the market. U.S. producers were unchallenged world leaders in this industry at the beginning of the 1970s. MITI decided in the late 1960s to enhance Japan's competitiveness in this field.<sup>66</sup> It restricted foreign

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reconquest. It means that the telecommunications administration has a direct role to play in electronics communication strategy.

*Mexandeau on PTT's Role in Telecommunications Industry*, L'Usine Nouvelle, June 16, 1983, at 94–98 (in French) (JPRS trans.).

64. As a group of Japanese firms explained in a 1980 advertisement:

Protection has been provided those industries that are in need of protection because of their newness and their fragility as emerging industries. Thus protection is negotiated for the semiconductor and computer industries, and telecommunications. . . . The impact on technology level is again direct. Sectors of high value-added, and high technology, with high growth potential, are afforded as much protection as can be arranged. This allows a nurturing of technology in the domestic market until competitive scale and sophistication are achieved.

*Japanese Technology Today*, SCI. AM., Oct. 1980, at J8–10.

65. *Le Monde* reported on September 22, 1983 that the French Government had launched an Electronics Sector Action Plan for the years 1982–1986. Subsidies of approximately 1 billion francs were granted for research and development and industrial investments in integrated circuits in 1983 alone. *Integrated Circuits Plan: Self-Sufficiency and Profitability Not Just Around the Corner*, *Le Monde*, Sept. 22, 1983, at 34 (in French) (JPRS trans.); see also *Government Subsidizes Electronics Industry R&D*, *ELECTRONIQUES ACTUALITIES*, Sept. 9, 1983, at 1, 3 (in French) (JPRS trans.). The Swedish Government is reportedly committing about \$100 million in funds to eight semiconductor developmental projects, designed in part to allay Sweden's current "heavy dependence on imports." *Swedish Five-Year Microelectronics Program Announced*, *Svenska Dagbladet*, Oct. 25, 1983, at 4 (in Swedish) (JPRS trans.).

66. See *MITI Plans to Restrict IC Makers*, *Japan Econ. J.*, Nov. 19, 1968, at 10; *Joint IC Production is Being Studied by Electronic Enterprises*, *Japan Econ. J.*, Aug. 8, 1967, at 15; *Electronics Companies Planning Major Spending on IC Equipment*, *Japan Econ. J.*, Mar. 28, 1967, at 14.

semiconductor investment and sales in Japan,<sup>67</sup> and coordinated the flow of U.S. semiconductor technology to nine designated Japanese firms, which it encouraged to collaborate on research and development.<sup>68</sup> Protection from U.S. competition during this period was crucial; in 1972 Japanese semiconductor firms warned that they would be wiped out if U.S. imports were freely permitted and that, therefore, the idea of complete liberalization was unacceptable.<sup>69</sup> However, through the early and mid 1970s the industry's technological level improved and formal restrictions on sales by American firms to Japan were removed. An executive director at Nippon Electric Corporation (NEC), a major semiconductor producer, explained how important protection had been to the establishment of Japan's semiconductor industry:

Looking back, it is quite clear that in the past, Japanese minicomputer makers have relied on American ICs [integrated circuits] and MITI gave administrative guidance, putting these things on the negative list. I think it was only then that the domestic industry was able to say to themselves, "now we can consider capital investment," and they were able to take the first step, because the demand was stabilized. If MITI had not placed them on the negative list, the computer market would have been taken over willy-nilly by America. In short, unless there is some foundation, some backing, no one will have courage to do so. It would be so risky. . . .

[S]ince MITI put up the negative list and gave administrative guidance, it was possible for us for the first time to stand on our own feet.<sup>70</sup>

In addition to protection, the Japanese Government actively assisted the leading semiconductor producers in research, development, and commercialization

67. Semiconductors were placed on the list of import items subject to quantitative restrictions. Import of these items required issuance of a license. See *Eight Import Quota Items Are Freed*, Japan Econ. J., Sept. 1, 1970, at 1, 5; *MITI Studies Freeing of 23 Import Items*, Japan Econ. J., July 29, 1969, at 1, 2. The semiconductor industry was placed on the so-called negative list so that foreign majority control was prohibited without prior government approval. See *FEO Seeks Sharp Cut Of 'Negative List'*, Japan Econ. J., Jan. 14, 1969, at 1. The *Japan Economic Journal* observed on July 29, 1969: "Japan had been enforcing such import restrictions . . . without the understanding of the General Agreement on Tariffs and Trade (GATT)." *MITI Studies Freeing of 23 Import Items*, *supra*, at 2.

68. Texas Instruments Inc. (TI) used its control of patents and technology needed by Japanese firms as leverage to secure approval of a local subsidiary in 1968. TI raised serious charges of patent infringement against NEC and threatened to seek an injunction against imports of infringing Japanese electronics products unless TI was permitted to establish a plant in Japan. In 1968, the company was allowed to set up a joint venture with Sony (which it bought out in 1972); however, in return TI was required to license its patents to Nippon Electric, Hitachi, Toshiba, Sony, and Mitsubishi at a reasonable price and to limit its level of production. MITI subsequently restricted the number of firms allowed to license technology obtained from TI. See J. TILTON, *INTERNATIONAL DIFFUSION OF TECHNOLOGY: THE CASE OF SEMICONDUCTORS* 146-47 (1971); *MITI Plans to Restrict IC Makers*, Japan Econ. J., Nov. 19, 1968, at 10; Japan-U.S. IC Due to Intensify on Domestic Market, Japan Econ. J., Jan. 30, 1968, at 10; *Texas Instruments Co. Is Still Insisting on Self-owned Enterprise*, Japan Econ. J., Oct. 31, 1967, at 9; *Electronics Companies Planning Major Spending on IC Equipment*, Japan Econ. J., Mar. 28, 1967, at 14;

69. Nihon Kogyo Shimbum, Oct. 30, 1972 (in Japanese) (Verner, Liipfert, Bernhard & McPherson trans.) (no page or title given).

70. *Plunging into IC Liberalization*, Nihon Kogyu Shimbum, Dec. 12, 1974 (in Japanese) (Toshio Tsukahira trans.) (no page given).

of semiconductor technologies. Assistance was rendered by two rival agencies, MITI and Nippon Telephone and Telegraph (NTT). NTT, the government telecommunications monopoly, possessed the foremost electronics research facilities in Japan and maintained a special relationship with a "family" of Japanese companies which supplied it with telecommunications equipment.<sup>71</sup> In 1975, NTT and MITI launched a loosely-collaborative effort to develop very large scale integration (VLSI) technology with five leading Japanese producers.<sup>72</sup> The NTT VLSI effort, involving three firms and expenditures by NTT of about \$350 million between 1975 and 1982,<sup>73</sup> resulted in the development of a prototype 64 kilobit random access memory (64K RAM)<sup>74</sup> in 1977 and a prototype 256K RAM in 1979.<sup>75</sup> The MITI effort, involving five firms and subsidies of about \$132 million between 1975 and 1979, resulted in the perfection of numerous product and process technologies including those used in electron beam lithography, a technique needed for production of the 256K RAM.<sup>76</sup>

U.S. semiconductor companies had dominated prior generations of RAMs. However, government backing of the Japanese VLSI effort enabled Japanese firms to develop the 64K RAM at a lower cost, eliminate technical obstacles to commercialization, and enter commercial production more quickly than otherwise would have been possible.<sup>77</sup> Low-interest government loans were provided to Japanese producers for the commercialization of semiconductor technologies pursuant to a series of industrial promotion laws.<sup>78</sup> Between 1978 and 1980, the

71. See H. HIRAMATSU, *THIS IS THE FACE BEHIND THE TELEPHONE: THE INSIDE STORY OF NTT AND KDD* 106-25 (1980) (in Japanese).

72. See *Five Computer Makers Confirm Plans for Joint Development of Ultra LSI*, Japan Econ. J., July 29, 1975, at 7; *Two Makers Will Collaborate in Ultra LSI Development*, Japan Econ. J., July 1, 1975, at 7.

73. See Nihon Keizai Shimbun, Oct. 23, 1982, at 1 (in Japanese) (U.S. Embassy, Tokyo trans.) (no title given).

74. A RAM is a standard high density memory device used in computers.

75. See Watanabe, *Electrical Communication Laboratories: Recent LSI Activities*, JAPAN TELECOMMUNICATIONS REV., Jan. 1979, at 3; *Density and Capacity for Magnetic Bubble Memory—256K Bit Chip Developed*, TECHNOCRAT, April 1980, at 39; *Responding to Criticism of the Closed Nature, Complete Opening of Super LSI Patents of NTT*, Nikkei Sangyo, Feb. 8, 1980 (in Japanese) (Toshio Tsukahira trans.) (no page given) [hereinafter cited as *Responding to Criticism*].

76. See *Over 1,000 VLSI Technologies Will Be Opened Shortly for Licensing*, Japan Econ. J., Sept. 2, 1980, at 9; *Cooperating to compete*, THE ECONOMIST, Apr. 5, 1980, at 75 [hereinafter cited as *Cooperating to compete*]; *Japan's Semiconductor Industry Is Reaching U.S. Technical Level*, Japan Econ. J., Feb. 26, 1980, at 8.

77. NTT helped Japanese firms overcome a number of technical obstacles to commercialization of the 64K RAM, including excessive power requirements and gate oxide thickness. It also released 64K RAM technology to Oki Electric, a non-participating company. *Responding to Criticism*, *supra* note 75; *Japan Leads One Step in 65K Bit MOS RAM Area*, Japan Econ. J., May 30, 1978, at 8, 18. An executive from NEC, a participating company, indicated that his company's commercialization of the 64K RAM "would have been delayed six months to one year without the cooperative project." Lohr, *How Japan Guides Industries*, N.Y. Times, May 18, 1983, at D1, D26 (quoting Tomihiro Matsumura). An executive from the same company commented in 1980 that without the joint effort, Japanese producers would have spent five times as much on research and development in the development of electron beam technology which is critical for the production of the 256K RAM. *Cooperating to compete*, *supra* note 76, at 75.

78. Financial aid measures to semiconductor producers—primarily low interest loans from the Japan Development Bank—are described in TRADE AND INDUSTRY RESEARCH GROUP, MITI MA-

leading Japanese producers launched an intensive buildup of production capacity for the 64K RAM, a phenomenon which observers attributed to "the management strategy of giving primary thought to mass production, as faithful adherent[s] of the learning curve."<sup>79</sup>

Japanese firms brought 64K RAM capacity on-stream more quickly and in higher volume than their U.S. counterparts, and accelerated mass production in the midst of stagnant world demand.<sup>80</sup> *The Japan Economic Journal* reported on November 3, 1981 that "[d]emand was not so strong as producers expected earlier. As a result, prices of 64Ks plunged to around 2,000 yen (\$9) or less per chip from 20,000 yen (\$90) only a year earlier."<sup>81</sup>

The result was called a competitive "bloodbath": U.S. producers of 64K RAMs suffered at least \$77 million in operating losses on that product between the first quarter of 1981 and the fourth quarter of 1982.<sup>82</sup> Some U.S. companies that had invested in initial research for the 64K RAM decided against entering the market, in effect demonstrating the successful use of learning curve tactics by Japanese firms.<sup>83</sup> At the end of 1982 Japanese firms held two-thirds of the world market for the device.

While a 1983-84 boom in demand for 64K RAMs has alleviated the competitive pressure on U.S. producers, Japanese firms are well positioned for the next generation product, the 256K RAM. They have received substantial assistance in commercializing this device from NTT, and they entered commercial

CHINE AND INFORMATION BUREAU, EXCERPTS FROM COMMENTARY ON PUBLIC LAW 84, LAW FOR PROVISIONAL MEASURES FOR THE PROMOTION OF DESIGNATED MACHINE AND INFORMATION INDUSTRIES (1978) (SIA trans.).

79. *VLSI War (Part 2)—Fall in 'Bogged down' Market—To One-Tenth in a Year: Users' Enthusiasm for Purchasing Stimulated*, *Nikkei Sangyo Shimbun*, Dec. 17, 1981, at 5 (in Japanese) (U.S. Embassy, Tokyo trans.); see also *Competition Around VLSI's*, *TECHNOCRAT*, Jan. 1982, at 54.

80. By early 1981, three U.S. firms were producing 64K RAMS, and six Japanese firms had begun large scale commercial production. All six were engaged in large scale production (defined as 20,000 or more units per month) by the second quarter of 1981. See SEMICONDUCTOR INDUS. ASS'N, *THE EFFECT OF GOVERNMENT TARGETING ON WORLD SEMICONDUCTOR COMPETITION* 35-36 (1983).

81. *Hitachi Will Greatly Boost Output of 64K RAM Chips*, *Japan Econ. J.*, Nov. 3, 1981, at 8. *Nikkei Sangyo Shimbun* commented on December 17, 1981 that "it can be said that such a downward curve [in prices] is as to slide down a cliff. . . ." *VLSI War (Part 2)—Fall in Bogged Down Market—To One-Tenth in a Year: Users' Enthusiasm for Purchasing Stimulated*, *Nikkei Sangyo Shimbun*, Dec. 17, 1981, at 5 (in Japanese) (U.S. Embassy, Tokyo trans.).

82. SEMICONDUCTOR INDUS. ASS'N, *supra* note 80, at 39. An executive from NEC, one of the leading Japanese producers of the 64K RAM, commented that "the Japanese perspective is that when you are making inroads into a market you can't afford the luxury of making money." *Chip Wars: The Japanese Threat*, *BUS. WK.*, May 23, 1983, at 82, 83 [hereinafter cited as *Chip Wars*].

83. SEMICONDUCTOR INDUS. ASS'N, *supra* note 80, at 60-61. In December 1981, *Nikkei Sangyo Shimbun* observed:

Semi-conductors are a typical industry of the sure-victory-by-the-first-move-type. "If ultra-modern products are produced belatedly, there will arise the vicious cycle of buyers being taken away when the products appear on the market, and not being able to recover the next investment because the price falls rapidly" [quoting Hitachi Board Chairman Yoshiyama]. Some semi-conductor manufacturers of the U.S. retreated from or gave up the production of 64-kilo-bit RAM's because they firmed up the judgment that if they start production in the face of the big offensive by Japanese manufacturers, it will be too late.

*VLSI War (Part 1)—Competition for Increased Production Overheating*, *Nikkei Sangyo Shimbun*, Dec. 16, 1981, at 5 (in Japanese) (U.S. Embassy, Tokyo trans.).

production in 1982.<sup>84</sup> While a number of U.S. firms may ultimately produce 256K RAMs, U.S. semiconductor industry sources predict that Japanese firms will dominate this product line more decisively than they have the 64K RAM.<sup>85</sup> In effect, within the space of six years, Japanese semiconductor producers have leapfrogged an early U.S. lead and secured a dominant position in a critical high technology product line with a multi-billion dollar market potential.

Several things are striking about this episode. One is the comparative speed and decisiveness with which the Japanese were able to transform their trailing market position into a commanding competitive lead through a combination of home market protection and subsidized joint research and development. The second is the virtual irrelevance of trade remedies as tools for countering this Japanese promotional effort.

The timeliness problem noted with respect to steel is even more acute in this instance. The most intense Japanese price-cutting in 64K RAMs took place over a period of approximately 12 months, and Japanese firms secured a commanding market position during that period which they have not subsequently relinquished. The available U.S. trade remedies probably would not have offered timely relief even if complaints had been filed early on, because, at that point, adequate evidence of injury would not have been available.

In any event, the antidumping and countervailing duty laws do not offer the hope of an effective remedy. A countervailing duty imposed on the Japanese VLSI research subsidies would bear no relationship to the practical effects of those subsidies in the market; that is, they would not affect the ability of Japanese firms to dominate the world market for one generation, and probably future generations, of a strategic high technology product line in a multi-billion dollar market. The antidumping laws are also of questionable relevance, since there was no demonstrable price discrimination between Japanese home and export markets, and "since costs of production decline as learning curve efficiencies are obtained, the average cost of a product can be very difficult to estimate before the product life cycle has run its course."<sup>86</sup>

The recent experience in random access memories is not an aberration. A similar pattern of competitive tactics—a home market protection, government research and development subsidies, a rapid capacity buildup, and ultimately, an aggressive export drive—has occurred or is occurring in other high technology sectors in Japan and elsewhere. Under such circumstances, a U.S. policy based primarily on a passive reliance on "the market" to determine our economic future may be dangerously naive.

### III. POSSIBLE NEW DIRECTIONS

It would be easy to survey the broad range of measures taken by foreign governments to enhance the competitive advantages enjoyed by their industries

84. *Japan Cos. Get NTT's 256K Skills*, ELECTRONIC NEWS, Oct. 11, 1982, at C.

85. See Pollack, *The Selling of the 256K RAM*, N.Y. Times, June 3, 1983, at D1; *Chip Wars*, *supra* note 82, at 82.

86. Wolff, *supra* note 21, at 356.

and conclude, first, that an open world trading system is an unattainable goal, and second, that we would do best to erect a wall of trade barriers to protect our own market. In doing so, however, much would be lost. Not only would other countries follow the U.S. lead, thus foreclosing important export markets for our industries, but our own economy would be deprived of the considerable benefit of foreign products that do reflect true comparative advantages enjoyed by foreign producers. Our exasperation at the effects of foreign government market intervention in particular sectors should not cause us to abandon our support for a world trading order that has been, and remains, the source of immense economic benefit to us.

At the same time, however, mere reliance on laissez-faire and existing trade remedies is a wholly inadequate response to the current international competitive environment. Government intervention and its effects are real and increasing. They cannot be adequately addressed by mere exhortations to U.S. industries to compete vigorously. Through continued reliance on the working of the market, we risk having our own economic future dictated by the industrial policy decisions of foreign governments. Indeed, to some extent, this is already happening.

If we are to chart a course between a return to the protectionism of the 1930s and the hazards of rigid adherence to laissez-faire in an era of resurgent mercantilism, we need to proceed from a new set of basic assumptions. We must recognize that the postwar GATT consensus on common norms of fair trade competition no longer exists. Other nations can and do deliberately create artificial comparative advantage for their industries. Our response must not be a mere appeal for equity but negotiations backed by the threat of sanctions designed to nullify the effects of artificial advantages. Such an approach presupposes a more consciously nationalistic, less impartially adjudicative role for the U.S. Government. We ourselves need not embrace a mercantilist trade policy, but our continuing pursuit of open world markets and nonintervention must be tempered by a greater degree of realism and a willingness to use the leverage which we enjoy—including access to our market—to secure those ends.<sup>87</sup>

Ultimately, the most satisfactory negotiated solution would be one that extends the rules of the multilateral trading system to cover foreign government policies which are aimed at creating artificial comparative advantages. The United States has attempted such reform but has encountered considerable resistance. Countries that have already been successful in creating such advantages are unlikely to

87. Various legislative initiatives have been introduced in the U.S. Congress in the 1980s which would authorize the U.S. government to accord "reciprocal" treatment to the products of another country which restricts U.S. access to its markets. Reciprocity proposals have been criticized as a radical departure from GATT multilateralism: "[D]ispute settlement reverts from the existing multilateral approach through the GATT to a bilateral or unilateral focus. . . . Reciprocity extended to its logical conclusion would establish a new order requiring a multiplicity of reciprocal bilateral and sectoral trade and investment policies." Hay & Sulzenko, *U.S. Trade Policy and 'Reciprocity'*, J. WORLD TRADE L. 471, 475-76 (1982). In fact, however, a multiplicity of bilateral policies already exists at the practical level—manifested in the varying degrees of real market access that exist between various bilateral trading partners, whatever their formal multilateral commitments may be under GATT. Reciprocity would seek to supplant de facto bilateral impediments to trade with bilateral agreements eliminating those impediments. This objective has not always proven attainable within the multilateral GATT framework.



limit their ability to do so again, and others are unlikely to foreclose the opportunity to try to create similar advantages. In either case, the United States loses and the multilateral system moves further from the ideal world of comparative advantage. Given the limits of a multilateral approach, our only recourse may well be a bilateral one.

Administrative and legislative reforms may be required to facilitate the negotiating process. Other nations use a panoply of mutually-reinforcing promotional measures to impart advantage to their industries; our current trade remedies offer a piecemeal and frequently inadequate response. A comprehensive promotional program should be offset by a comprehensive response, which may entail application of a series of mutually-reinforcing trade and domestic policies. The existence of a more flexible and efficient array of responses than currently exists would facilitate this process, as would the centralization of authority in a single agency to administer and coordinate an effective response.

One of the principal weaknesses of our current system of trade remedies is its reactive nature. Relief is usually forthcoming, if at all, only after injury has occurred and often after a permanent shift in competitive advantage has taken place. This must change. Active monitoring of foreign government industrial programs by the U.S. Government—coupled with a willingness to apply trade remedies in a preemptive, rather than a reactive, mode—may form part of the answer to this problem. The certainty that a promotional program designed to create artificial comparative advantage will be met by a comprehensive U.S. response may ultimately deprive such programs of some of their appeal.

Finally, there is no reason why the U.S. Government should not take a more active role in seeking to enhance generally the competitiveness of all U.S. industries through policies that create an environment in which competitive industries may more readily flourish. This would include measures that encourage technological development and greater industrial efficiency throughout the entire economy, such as increased financial aid for technical education, tax incentives for research and development and industrial rationalization, antitrust reform, and improved patent protection.

Such measures would establish a closer correlation between our trade policy and our own economic interests, but they would not herald an abandonment of our basic commitment to open markets and free trade. We should remain willing to compete, on a purely *laissez-faire* basis, with any nation willing to do so on those terms. However, a more decisive response by this country to mercantilism is essential if we are to preserve a world trade order where such open competition is the norm, rather than the exception.